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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

COLE, LAURA C

ART UNIT PAPER NUMBER

1744

DATE MAILED: 03/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/697,213

Applicant(s)

JIMENEZ ET AL.

Examiner

Laura C Cole

Art Unit

1744

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 February 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7,9-38,45,47-53,55-57,59-61,64-66 and 75-78 is/are pending in the application.
- 4a) Of the above claim(s) 2-7,9-13,15-38,50-53,55-57,59-61,64-66,76 and 78 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,14,45,47-49,75 and 77 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 October 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 10142004.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of Species C (Figures 13-16) drawn to Claims 1, 14, 45, 47-49, 75, and 77 in the reply filed on 07 February 2005 is acknowledged.

Information Disclosure Statement

2. The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609 A(1) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered.

The French Patent 38440 on Page 2 Line 14 was not included in the Information Disclosure Statement of 14 October 2004 and a copy of this document is not available to the Examiner.

Drawings

3. The drawings are objected to because:

A. Page 26 Line 21 discloses a handle "1012A" and a head "1014A" that are not included in the drawings. However, Figure 11 includes a handle "1112A" and a head "1114A" so it is uncertain to the Examiner if "1012A" and "1014A" are missing from the figures or if there is a typographical error.

Art Unit: 1744

B. Page 32 Lines 7-23 discuss reference numerals that are shown in Figures 17 and 18. However, the reference numbers shown in Figures 17 and 18 do not correspond to the reference numerals discussed.

C. Page 32 Line 24, it appears that head "14" is a typographical error.

D. Page 34 Line 5, "1924" is corresponding to a "face." However in Figure 19, it appears that "1924" is not a "face."

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

4. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the

Art Unit: 1744

description: a head "3114" (Page 33 Line 9), a face "1822A" (Page 33 Line 24), a face "2122A" (Page 34 Line 13), or a face "2222A" (Page 35 Line 2). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

5. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: Figure 6 "636", Figure 8 "836", Figure 11 "1125", Figure 17 "1214", "1216", "1212", and "1210", Figure 18 "1828", Figure 21 "2128" and "2123", Figure 22 "2228", Figure 23 "2328" and "2322", Figure 24 "2428" and "2422", Figure 29 "2910A".

Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37

Art Unit: 1744

CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

6. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

The abstract of the disclosure is objected to because the abstract is less than 50 words in length. Correction is required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1 and 75 are rejected under 35 U.S.C. 102(b) as being anticipated by Stansbury, Jr., USPN Re. 35,941.

Art Unit: 1744

Stansbury, Jr. discloses a toothbrush comprising a handle (22) and a head (38) connected to the handle by a neck element (36), a mechanical vibratory device that causes vibration (42) and wherein the head comprises movable elements (40) attached thereto (via aperture 60; Column 7 Lines 48-35). The mechanical vibratory device is located in the head or adjacent to it (see Figure 1, the placement of the device is located in and adjacent to the head) and is operatively connected to an electric power source (30).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation

Art Unit: 1744

under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

8. Claims 1, 14, and 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Urbush, USPN 3,316,576 in view of Halm, USPN 5,651,158 (herein Halm '158).

Urbush discloses a toothbrush comprising a handle (12), a head (18) connected to the handle by a neck element (14), and a mechanical vibratory device (portions 40, 41, 42, 43) which causes the head to vibrate (via 21; Column 2 Lines 33-39). The mechanical vibratory device is located in the region adjacent to the head (see Figures). Urbush utilizes a conventional toothbrush (Column 1 Lines 48-49) and the device is capable of using various sizes and types of conventional toothbrushes in the vibratory portion (Column 1 Lines 13-20). Urbush does not include a head comprising movable elements.

Halm '158 discloses a toothbrush comprising a head (41) that comprises movable elements (44; see Figures 4A-4F), the movable element is a movable portion (44) and there being a fixed portion (42) surrounding the movable portion (Figures 4A, 4B, and 4F), a resilient membrane (49) extending between at least a portion of an area (48) between the fixed and movable portions (see Figures 4A-4F) and the movable portions and membrane being capable of flexing to alter its original orientation during use of the toothbrush and then recovering to assume its original orientation (Figure 4D shows the flexing during use and then is capable of assuming its original orientation in

Art Unit: 1744

that the bristle carriers are resiliently linked to each other and the frame; Column 5 Lines 17-19). The toothbrush head bends to accommodate itself to the concave and convex curves of the teeth (Column 1 Lines 47-51).

It would have been obvious for one of ordinary skill in the art at the time the invention was made to substitute the conventional toothbrush head of Urbush for one having a movable portion and a fixed portion with a resilient membrane between the fixed and movable portions, as Halm '158 teaches, so that the toothbrush can resiliently conform to the inner mouth and tooth surfaces of which the toothbrush is cleaning to better aid in the cleaning of teeth and the oral cavity.

9. Claims 47-49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Urbush, USPN 3,316,576 in view of Halm, USPN 5,651,158 (herein Halm '158), and further in view of Halm, USPN 6,178,582 (herein Halm '582).

Urbush and Halm '158 disclose all elements above in paragraph 8, however do not include at least one cleaning element included in an area between the fixed and movable portions of the head. It is noted that Halm '158 includes cleaning elements (46, 47) on both the fixed and movable portions.

Halm '582 discloses a head (2) of a fixed portion (6) and a movable portion (67) that has a resilient membrane (10) extending between at least a portion of the fixed and movable portions (see Figures 18-21), the membrane is capable of flexing to alter its original orientation during use (see Figure 20) and to recover to assume its original orientation (Column 1 Line 62 to Column 2 Line 9). '582 includes at least one additional cleaning element (see Figures 18) in an area between the fixed and movable portions.

Art Unit: 1744

The cleaning elements are bristles, which are considered to be "wipers" ("wiper" is defined as "something, such as a towel, used for wiping", wherein "wiping" is in turn defined as "to subject to light rubbing or friction, as with a cloth or paper, in order to clean or dry." Both definitions are from *The American Heritage® Dictionary of the English Language, Fourth Edition*

Copyright © 2000 by Houghton Mifflin Company.) The wipers are mounted on the resilient membrane and "rotate" towards one another upon application of sufficient force on the toothbrush (see comparison of Figures 19-20, especially shown in the two rightmost wiper tufts on "10" are rotated towards each other due to the force imparted by teeth "12".)

It would have been obvious for one of ordinary skill in the art to modify the toothbrush of Urbush and Halm '158 to further include an additional cleaning element in an area between the fixed and movable portions, as Halm '582 teaches, in order to increase the amount of cleaning elements being employed to clean teeth and thereby increasing the surface area of cleaning elements that are effecting the teeth and gums.

10. Claims 1, 14, 45, 75, and 77 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hafliger et al., USPN 6,802,097 in view of Halm, USPN 5,651,158 (herein Halm '158).

Hafliger et al. discloses a handle (1), head (3) connected to the handle by a neck element (4), and a mechanical vibratory device (10) which causes the head to vibrate (Column 2 Lines 40-44) wherein the mechanical vibratory device is located in the head or in a region adjacent to the head (see Figures 1-4) and operatively connected to an

Art Unit: 1744

electrical power source (see Figures, Column 2 Lines 44-47). Hafliger does not disclose that the head comprises movable elements.

Halm '158 discloses all elements above described in paragraph 8,

It would have been obvious for one of ordinary skill in the art to modify the toothbrush head configuration of Hafliger et al. for one having a movable portion and a fixed portion with a resilient membrane between the fixed and movable portions, as Halm '158 teaches, so that the toothbrush can resiliently conform to the inner mouth and tooth surfaces of which the toothbrush is cleaning for better or more effective cleaning of teeth.

11. Claims 47-49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hafliger et al., USPN 6,802,097 in view of Halm, USPN 5,651,158 (herein Halm '158) as applied to claim 45, and further in view of Halm, USPN 6,178,582 (herein Halm '582).

Hafliger et al., Halm '158, and Halm '582 disclose all elements above in paragraphs 8, 9, and 10.

It would have been obvious for one of ordinary skill in the art to modify the toothbrush of Hafliger et al. and Halm '158 to further include an additional cleaning element in an area between the fixed and movable portions, as Halm '582 teaches, in order to increase the amount of cleaning elements being employed to clean teeth and thereby increasing the surface area of cleaning elements that are effecting the teeth and gums.

Conclusion

Art Unit: 1744

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

USPN 5,546,624 to Bock additionally discloses a toothbrush having a handle, head connected to a handle by a neck element, and a mechanical vibratory device located in the head that causes the head to vibrate. The vibratory device is operatively connected to an electrical power source.

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura C Cole whose telephone number is (571) 272-1272. The examiner can normally be reached on Monday-Thursday, 7:30am - 5pm, alternating Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sun (John) Kim can be reached on (571) 272-1142. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

LCC
03 March 2005


JOHN KIM
SUPERVISORY EXAMINER
GROUP 1700